

A NEW TRICHADENID MITE WHICH FURTHER INDICATES A
PHYLOGENETIC RELATIONSHIP BETWEEN THE
TETRANYCHIDAE AND ERIOPHYIDAE

(ACARINA)

BY EDWARD W. BAKER, *Bureau of Entomology and Plant Quarantine,
U. S. Department of Agriculture*

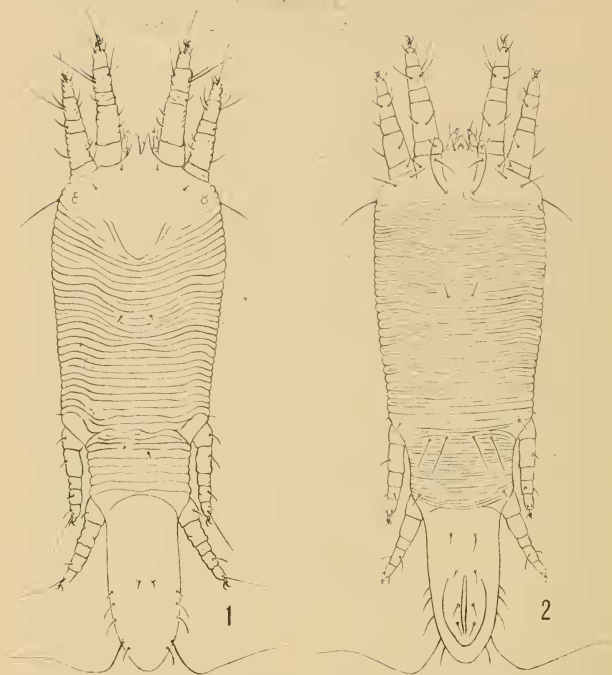
The adults of this mite are not known, but since the nymphal forms seem to offer evidence of relationship between two large families of mites, the species is described from nymphal material. The nymphs vary from the typical form more or less similar to the adults in ratio of length to width, to the extremely elongated form figured. This has not been noted in the few other species studied. In the related genus *Brevipalpus* molting nymphs may become more elongate than usual, but the mite described is not in the molting stage, although it may be approaching it. The interesting point in this species in its elongate state is its general resemblance to the eriophyid mites. The shape of the body, as well as the type of transverse striation, are similar, and these may be another link between the Tetranychidae, to which the Trichadenidae are closely related, and the Eriophyidae. Eriophyid mites possess only four legs and a vermiform body, and have been placed in a separate suborder, the Tetrapodili (Vitzthum, 1943). However, the biology, mouth parts, and tarsal claws have led other acarologists to believe that these mites are related to the Tetranychidae (Ewing, 1922), and this trichadenid may be one more indication of that connection.

Tenuipalpus eriophyoides, new species

Nymph II: Size varies from the typical form, which is 300 μ long by 160 μ wide, to the elongate form, which is 450 μ long by 153 wide, this latter being eriophyidlike in appearance. The body setae are as figured—the two anterior pair short, possibly serrate; the third pair located laterad of the eyes long, serrate; the marginal pair just anterior to legs III short, serrate; five pairs of marginal setae on posterior fifth of body serrate, the next to last pair being long, whiplike, and the remaining pairs of medium length, the anterior pair being about half as long as the others. The rest of the body setae appear to be more or less typical of the genus.

This mite differs from the nymph of *Tenuipalpus granati* Sayed, an Egyptian species, in that the setae laterad of the eyes and anterior to legs III are not equal in length, nor are the four shorter posterior marginal setae.

Type (specimen figured) in U. S. National Museum, No. 1800. Four other specimens, including three typical forms and one elongate form, on same slide. Material collected by A. Dutt, January 1, 1929, at Margil, Basra, Mesopotamia (Iraq). Host unknown.



EXPLANATION OF FIGURES

Tenuipalpus criophyoides, new species. Figure 1. Dorsal view of elongate nymph II. Figure 2. Ventral view of elongate nymph II.

REFERENCES CITED

- EWING, H. E., 1922. The phylogeny of the gall mites and a new classification of the suborder Prostigmata of the order Acarina. Ent. Soc. Amer. Ann. 15 (3): 213-222.
- VITZTHUM, H., 1943. Acarina. Bronns Klassen und Ordnungen des Tierreichs, vol. 5, part 4, book 5, no. 7, p. 924.